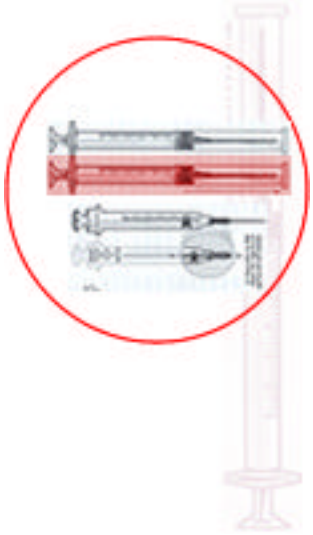
NIOSH recommends that health care facilities use safer medical devices to protect workers from needlestick and other sharps injuries. Since the passage of the Needlestick Safety and Prevention Act in 2000 and the subsequent revision of the OSHA Bloodborne Pathogen Standard, all health care facilities are required to use safer medical devices.

SAFER MEDICAL DEVICE IMPLEMENTATION IN HEALTH CARE FACILITIES

SHARING LESSONS LEARNED

NIOSH has asked a small number of health care facilities to share their experiences on how they implemented safer medical devices in their settings. These facilities have agreed to describe how each step was accomplished, and also to discuss the barriers they encountered and how they were resolved, and most importantly, lessons learned.



This Skilled Nursing Residence is a 139 bed teaching nursing home which is owned by a University. We are located on the university campus and serve as a clinical practice site for nursing students, as well as other students including, physical therapy and occupational therapy students, dietitian students, social work student and clinical pastoral education students. We operate three distinct units; a 39 bed Medicare Unit, a 31 bed Dementia Unit, and a 69 bed long term care unit.

Safe Medical Devices Project

Phase Five

NOTE: Per the design of this study, Phase Five was to focus on the implementation and monitoring of the new device throughout the facility. Due to a change in the nature of the study and due to budgetary constraints, we have made the decision not to introduce this device to the rest of the facility. See below for further detail.

I. Describing the Process

Our process was to identify priorities and determine the medical devices that would have the greatest impact on preventing occupational exposure.

The three main areas of consideration were:

- Needle stick injury patterns
- Safer medical devices currently in use
- OSHA regulatory requirements

At the beginning of the study, staff felt strongly that the issues were related to disposal. Housekeepers agreed that needle disposal seemed to be a problem. They all agreed that more sharps disposal containers were needed. It was determined by the committee that the study would focus on the sharps disposal containers as the safer medical device.

The vender provided containers that met with the approval of the committee and the devises were installed on the Medicare Unit. As noted in Phase Four, 18 sharps containers were ordered (1 each per 18 rooms). Staff training was provided by our staff development coordinator.

The committee developed criteria upon which we would evaluate the success of utilizing sharps disposal containers in each room. It was agreed that these criteria should be composed of two general areas; objective information and subjective information. The objective information was based on the number of episodes of needle sticks in the building one year ago during the months of February, March, April and May of 2002 (a total of two needle sticks) and the number of needle sticks that have occurred since the new devices were installed on April 1, 2003 through May 30, 2003 (0 needle sticks). The subjective information was collected through interviews with licensed staff and was focused on the following questions:

1. Do you feel that the placement of the sharps disposal devices in each room has produced a safer environment?

2. Do you feel that the placement of the sharps disposal devices in each room is more convenient and therefore added to work productivity?
3. Do you feel that the placement of the sharps disposal devices next to the sink increased the likelihood of better hand washing practices?
4. What problems or concerns do you have about the use of this new device?

Note: For specific information about the subjective feedback, see Phase IV of this study. In summary, we found that staff felt that the placement of the sharps disposal device in the resident rooms was more convenient, led to better hand washing and added to productivity. In regard to the actual apparent reduction in needle sticks, we made a discovery that the facility had begun to utilize only safety sharp devices in the facility. Therefore, all syringes, lancets and IV kits are equipped with a protective sheath. The episodes where needle sticks have occurred have been a result of a nurse giving an injection to a resident, the resident pulling away and the nurse accidentally sticking her/himself. Therefore to date, needle sticks have not occurred based on the inappropriate disposal of a sharp or a needle stick occurring in the transportation of the sharp to the disposal device but rather, during the actual use of the sharp. Therefore, it was found that the placement of the sharps container in each room may be more convenient but, does not lead to a safer environment.

2. Obtaining Information

At the end of Phase IV, it became apparent that our task now has become to determine the cost of obtaining and installing sharps disposal devises in the rest of the resident rooms in the facility and determining whether that cost is justified based only on convenience as opposed to greater safety.

A meeting was held both with the Maintenance Supervisor and also the Administrator, the Director of Clinical Services and the Inservice Coordinator for the facility. The Maintenance Supervisor informed me that the cost per unit of the sharps disposal device is $19.00. There are an additional 51 rooms in the facility that do not have the device presently and therefore the cost for materials only would be $969.00. The Maintenance Department in the facility would be able to install the device and therefore the cost of installation would come out of staff labor.

This cost was discussed in regard to the current budget. The determination was made that capital costs for the facility need to be focused on issues that have a direct impact on resident comfort, safety and staff safety. It was therefore decided that this is not a reasonable cost for us at this time since it is based simply on convenience.

3. Recommendations

Our overall recommendations at this time are to continue to consider the addition of these devices in the facility in the future when the budget will support such an acquisition.

4. Next Steps

Continue to consider this capital expenditure in the future.

5. Lessons Learned

As reviewed in Phase IV of this study, a very important lesson was learned during this process. At the beginning of this study, the committee was in total agreement as to the cause of needle sticks and felt that episode frequency was based on the actual location of the sharps disposal devise. Since the study was begun, new safety devices (sheath protected sharps) were introduced which affected the eventual outcome of this study. The focus of the study and therefore the criteria by which it was evaluated changed from safety to convenience.

As stated in Phase IV, my advise to other facilities is to be aware of other devices being introduced into the study that may effect the eventual outcome. We did not control all of the variables in this study which changed its nature.

Attachment A

Type of Staff	**Hours Spent on Phase V**
Management	2
Administrative	2.5
Front-line	0
Total	**4.5**

Other, non-labor items:

None